UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/887,908	06/22/2001	Dominik J. Schmidt		7455

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EXAMINER
LA, ANH V

ART UNIT	PAPER NUMBER
2636	

DATE MAILED: 08/26/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed
  after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any
  earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *07 June 2004*.

2a)☒ This action is **FINAL.**   2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is
closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-10 and 13-20* is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☒ Claim(s) *13* is/are allowed.

6)☒ Claim(s) *1-10,14-20* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage
application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☐ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.

5)☐ Notice of Informal Patent Application (PTO-152)

6)☐ Other: _____.

DETAILED ACTION

1.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set
> forth in section 102 of this title, if the differences between the subject matter sought to be patented and
> the prior art are such that the subject matter as a whole would have been obvious at the time the
> invention was made to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was made.

2.   Claims 1-3, 6-8, 14-20, are rejected under 35 U.S.C. 103(a) as being

unpatentable over Brady in view of Friedman and Brehm.

Regarding claim 1, Brady discloses a method for parallel testing of memory

(column 1, lines 35-60) on a plurality of wireless devices, each device including memory

(col. 1, lines 35-60), and a tester 322, 228 including a transceiver, and a computer 322,

228 coupled to the transceiver (col. 4, lines 60-65) to test all wireless devices in parallel

by issuing a single test command using a wireless signal (fig. 1-3b, col. 3, lines 30-50),

further comprising a short-range wireless transceiver core being adapted to receive

signals from an on-chip antenna 316, the method comprising issuing a command to

each wireless device to test its memory, retrieving the results of the command to test

memory, and identifying one or more wireless devices with failed memory (figures 1-3b,

column 3, lines 5-50). Brady does not disclose a processor coupled to the memory and

the computer to store test patterns and test results. Friedman discloses a processor

coupled to memory (col. 12, lines 55-60). Brehm discloses a computer to store test

patterns and test results (abstract). It would have been obvious at the time the invention was made to a person having ordinary skill in the art to include a processor coupled to the memory and the computer to store test patterns and test results to the method of Brady as taught by Friedman and Brehm for the purpose of effectively processing and storing the tests.

Regarding claim 2, Brady discloses wireless RF protocol (col. 3, lines 30-50).

Regarding claim 3, Brady discloses one or more pads on the devices as antennas (col. 4, lines 50-52).

Regarding claim 6, Brady discloses performing wafer sort tests on the wireless devices (col. 6, lines 15-37).

Regarding claim 7, Brady discloses performing parametrics tests on the wireless devices (col. 6, lines 15-37).

Regarding claim 8, Brady discloses collecting memory test results from the wireless devices and displaying test results on a computer (228, 322).

Regarding claim 14, Brady discloses a system comprising one or more wireless device, each device including memory (col. 1, lines 35-60) and a multi-mode wireless circuit on a single substrate (fig. 2A-3B), a tester 322, 228 including a transceiver, a computer 322, 228 coupled to the transceiver (col. 4, lines 60-65) to test all wireless devices in parallel by issuing a single test command using a wireless signal (fig. 1-3b, col. 3, lines 30-50), and wireless RF protocol (col. 3, lines 30-50). Brady does not disclose a processor coupled to the memory and the computer to store test patterns and test results. Friedman discloses a processor coupled to memory (col. 12, lines 55-60).

Brehm discloses a computer to store test patterns and test results (abstract). It would have been obvious at the time the invention was made to a person having ordinary skill in the art to include a processor coupled to the memory and the computer to store test patterns and test results to the system of Brady as taught by Friedman and Brehm for the purpose of effectively processing and storing the tests.

Regarding claim 15, Brady discloses a system comprising one or more wireless device, each device including memory (col. 1, lines 35-60), a tester 322, 228 including a transceiver, a computer 322, 228 coupled to the transceiver (col. 4, lines 60-65) to test all wireless devices in parallel by issuing a single test command using a wireless signal (fig. 1-3b, col. 3, lines 30-50), and a short-range wireless transceiver core being adapted to receive signals from an on-chip antenna 316. Brady does not disclose a processor coupled to the memory and the computer to store test patterns and test results. Friedman discloses a processor coupled to memory (col. 12, lines 55-60). Brehm discloses a computer to store test patterns and test results (abstract). It would have been obvious at the time the invention was made to a person having ordinary skill in the art to include a processor coupled to the memory and the computer to store test patterns and test results to the system of Brady as taught by Friedman and Brehm for the purpose of effectively processing and storing the tests.

Regarding claim 16, Brady discloses a system comprising one or more wireless device, each device including memory (col. 1, lines 35-60), a tester 322, 228 including a transceiver, a computer 322, 228 coupled to the transceiver (col. 4, lines 60-65) to test all wireless devices in parallel by issuing a single test command using a wireless signal

(fig. 1-3b, col. 3, lines 30-50), and a short-range wireless transceiver core being adapted to receive signals from an on-chip pad 316 (col. 4, lines 50-52). Brady does not disclose a processor coupled to the memory and the computer to store test patterns and test results. Friedman discloses a processor coupled to memory (col. 12, lines 55-60). Brehm discloses a computer to store test patterns and test results (abstract). It would have been obvious at the time the invention was made to a person having ordinary skill in the art to include a processor coupled to the memory and the computer to store test patterns and test results to the system of Brady as taught by Friedman and Brehm for the purpose of effectively processing and storing the tests.

Regarding claim 17, Brady discloses a system comprising one or more wireless device, each device including memory (col. 1, lines 35-60) being adapted to receive built-in-self-test code (col. 3, lines 30-50), a tester 322, 228 including a transceiver, a computer 322, 228 coupled to the transceiver (col. 4, lines 60-65) to test all wireless devices in parallel by issuing a single test command using a wireless signal (fig. 1-3b, col. 3, lines 30-50). Brady does not disclose a processor coupled to the memory and the computer to store test patterns and test results. Friedman discloses a processor coupled to memory (col. 12, lines 55-60). Brehm discloses a computer to store test patterns and test results (abstract). It would have been obvious at the time the invention was made to a person having ordinary skill in the art to include a processor coupled to the memory and the computer to store test patterns and test results to the system of Brady as taught by Friedman and Brehm for the purpose of effectively processing and storing the tests.

Regarding claim 18, Brady discloses a system comprising one or more wireless

device, each device including memory (col. 1, lines 35-60) being adapted to receive

parametrics test code (col. 3, lines 30-50, col. 6, lines 15-37), a tester 322, 228

including a transceiver, a computer 322, 228 coupled to the transceiver (col. 4, lines 60-

65) to test all wireless devices in parallel by issuing a single test command using a

wireless signal (fig. 1-3b, col. 3, lines 30-50). Brady does not disclose a processor

coupled to the memory and the computer to store test patterns and test results.

Friedman discloses a processor coupled to memory (col. 12, lines 55-60). Brehm

discloses a computer to store test patterns and test results (abstract). It would have

been obvious at the time the invention was made to a person having ordinary skill in the

art to include a processor coupled to the memory and the computer to store test

patterns and test results to the system of Brady as taught by Friedman and Brehm for

the purpose of effectively processing and storing the tests.

Regarding claim 19, Brady discloses the wireless devices being formed on a

wafer, a power line deposited on the wafer during processing and adapted to be

removed after wafer dicing and a plurality of switches coupled to the devices and the

power line to allow each wireless device on the wafer to be tested in a sequence (col. 6,

lines 15-37, col. 8, lines 15-65, fig. 2A-5B).

Regarding claim 20, Brady discloses a system comprising one or more wireless

device, each device including memory (col. 1, lines 35-60) storing test code (col. 3, lines

30-50, col. 6, lines 15-37) and storing data after testing operation, a tester 322, 228

including a transceiver, a computer 322, 228 coupled to the transceiver (col. 4, lines 60-

65) to test all wireless devices in parallel by issuing a single test command using a wireless signal (fig. 1-3b, col. 3, lines 30-50). Brady does not disclose a processor coupled to the memory and the computer to store test patterns and test results. Friedman discloses a processor coupled to memory (col. 12, lines 55-60). Brehm discloses a computer to store test patterns and test results (abstract). It would have been obvious at the time the invention was made to a person having ordinary skill in the art to include a processor coupled to the memory and the computer to store test patterns and test results to the system of Brady as taught by Friedman and Brehm for the purpose of effectively processing and storing the tests.

3.   Claims 4-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Brady in view of Friedman and Brehm as applied to claim 1 above, and further in view of Corman.

Regarding claims 4-5, Brady in view of Friedman and Brehm discloses all the claimed subject matter as set forth above in the rejection of claim 1, but does not disclose the use of power traces on the devices as antennas. Corman discloses the use of power traces on devices as antennas (col. 8, lines 39-45). It would have been obvious at the time the invention was made to a person having ordinary skill in the art to include the use of power traces on the devices as antennas to the method of Brady (modified by Friedman and Brehm) as taught by Corman for the purpose of effective wireless communication.

4.   Claims 9-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Brady in view of Friedman and Brehm as applied to claim 1 above, and further in view of

Hsia.

Regarding claims 9-10, Brady in view of Friedman and Brehm discloses all the

claimed subject matter as set forth above in the rejection of claim 1, but does not

disclose the step of erasing test software from the memory of each wireless device and

reclaiming memory for the test software of operating software on each wireless device.

Hsia teaches the use of the step of erasing test software from the memory of each

wireless device and reclaiming memory for the test software of operating software on

each wireless device (figure 2). It would have been obvious at the time the invention

was made to a person having ordinary skill in the art to include the step of erasing test

software from the memory of each wireless device and reclaiming memory for the test

software of operating software on each wireless device to the method of Brady

(modified by Friedman and Brehm) as taught by Hsia for the purpose of reclaiming the

memory after performing tests.

5.   Claim 13 is allowed.

Answer to Remarks

6.   Applicant's arguments filed on June 07, 2004 have been fully considered.

In the Office Action dated on September 26, 2003, because the language of

original claims 14-18 and 20 were unclear and based on the limitations recited in

original claims 14-18 and 20, the Examiner indicated that claims 14-18 and 20 would be

allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, second

paragraph, set forth in the Office action dated on September 26, 2003 and to include all

of the limitations of the base claim and any intervening claims. Said base claim is

original claim 13 and said base claim is not original claim 11. It is noted that the

limitations recited in original claims 14-18 and 20 are referred to cited limitations in

original claim 13. Original claim 13 is objected to as being dependent upon a rejected

base claim, but would be allowable if rewritten in independent form including all of the

limitations of the base claim and any intervening claims, therefore original claims 14-18

and 20 are objected to as being dependent upon base claim 13.

7.   Applicant's amendment necessitated the new ground(s) of rejection presented in

this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37

CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE

MONTHS from the mailing date of this action. In the event a first reply is filed within

TWO MONTHS of the mailing date of this final action and the advisory action is not

mailed until after the end of the THREE-MONTH shortened statutory period, then the

shortened statutory period will expire on the date the advisory action is mailed, and any

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Anh V La whose telephone number is (703) 305-3967. The examiner can normally be reached on Mon-Fri from 9:30am to 6:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jeffery Hofsass can be reached on (703) 305-4717. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

ANH V. LA
PRIMARY EXAMINER

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Primary Examiner
Art Unit 2636

Al
August 20, 2004